



KARO ECHO Newsletter

KARO ECHO

Serving the communities of El Cerrito and Kensington, California

Web: www.karoecho.net

Facebook:
facebook.com/karoecho

Email: info@karoecho.net

Important Frequencies

KE Primary: 146.415 MHz
Weekly Net, Thurs. 1900

KE Secondary: 146.430 MHz

4Cs Repeater: 145.110 MHz
(TX down 600 with PL 82.5)

Monthly Meetings

In-person meetings

2nd Monday of each month
7:30 pm

Arlington Park Clubhouse,
(new location)
1120 Arlington Blvd,
El Cerrito, CA

The next meetings are:

March 11th, 2019

April 8th, 2019

May 13th, 2019

Meeting minutes are on the website in the past events page. Thank you to Natalie KM6UCF.

What's New

Successful Simulated Emergency Test (SET) Feb. 23, 2019

The **KARO ECHO Simulated Emergency Test (SET)** on February 23 ran from 0930 to 1230 hours. We plan to run two SETs a year in order gain hands-on experience, test our equipment, and refine our procedures. The scenario was a 6.8 – 6.9 earthquake centered in Kensington under Fire Station 65. Participants checked in to the net at 0930 and NCS received Modified Mercalli Intensity readings, assigned tactical callsigns, and dispatched operators to various portable/mobile sites such as the EOC, all known CERT Area Incident Command Posts (ICPs), and portable ICPs. Over 40 formal written messages were handled and 24 hams participated. If you have not already sent copies of the messages that you received, please do so by sending the copy in an email to ni6a@arrl.net An [online document with a critique/debriefing of the SET is available](#).



David KJ6AAT mobile station at EC10 Centennial Park. Photo by Diane

Further discussion will occur at the next KAROECHO meeting (March 11).

The [general SET Plan](#) document and a [timed sequence of message events](#) is also available online

Thanks to everyone who participated. We cannot do this job without you. Special kudos to KE6BEE (net control station) and KM6HBO (operating from the El Cerrito city hall EOC). More photos of the SET are at the end of this newsletter.

LOCAL NETS**KARO ECHO NET**

146.415 MHz Simplex

Thursday eve, immediately after the West Contra Costa RACES Net, but never before 1900 hours local time.

West Contra County ACS/RACES Net

145.110 MHz repeater

(TX down 600 with PL 82.5)

Thursday: 1845 local time

Contra Costa County HF EmComm/RACES Net

3893 KHz

Thursday: 1835 local time

American Red Cross of the Bay Area (ARCBA)

WW6BAY Repeater

443.975 MHz

TX =5 MHz, PL 100 Hz

Wednesday: 2000 local time

BOARD OFFICERS

President: Hal KK6NDF

Treasurer: Larry KK6GIO

Secretary: Natalie KM6UCF

Vice President Pro Tem:
Don NI6AEmergency Coordinator:
Jamel JM6HBOExec Board Member at Large:
Howdy KE6BEE

Webmaestro: Rob K6RJM

What's New *(continued)***New Monthly Meeting Location**

Starting with the Monday, March 11th meeting at 7:30 pm, KARO ECHO will meet at the Arlington Park Clubhouse in El Cerrito, 1120 Arlington Blvd.

KARO ECHO recently received sponsorship from the City of El Cerrito for free use of their facilities for club monthly meeting and special events, such as the recent SET in February and other upcoming training. Thanks to the diligent work of Howdy, KE6BEE.

New Post Office Box and Bank Account

Larry, KK6GIO, the KARO ECHO treasurer has been busy readying us to apply for a 501(c)3 tax-deductible non-profit status. Larry has ascertained a bank account and tax number for KARO ECHO and also has established a KARO ECHO post office box at the US Post Office adjacent to El Cerrito plaza. That has been accomplished by personal expenditures which we hope will be recouped by donations, fundraising, and dues.

Action Item: Please send in your dues to KARO ECHO -- P.O. Box 2025 -- El Cerrito, CA. 94530-3651 or see Larry at this Monday's meeting at the Arlington Park clubhouse. You can still be a non-voting member of KARO ECHO without paying dues, but only licensed Amateur Radio Operators and dues paying members will be allowed to vote. So if you can't afford \$30 for full membership (or \$40 for family membership), please come and participate in any case. Your suggestions are important to disaster comms in our cities.

Activities**Radio Mapping of CERT Areas**

The SET helped us map out successful communications between within Kensington and El Cerrito and identify the spots that need an extra boost regarding antennas and/or power. While we are beginning to have a good handle on RF mapping in the area, we plan to do extensive radio mapping of KE/EC radio hotspots and dead spots in the near future. Minimum requirements in order to be heard in most locations is an HT connected to a gain magmount antenna, Jpole, SlimJim, or equivalent ½ wave or larger antenna. A more optimal, radio go-kart would include a large capacity deep cycle battery, a 25-50 watt radio and a 6dbd gain antenna mounted on a tripod or other similar portable base. **Stations operating an HT and a rubber duck antenna** will struggle to be heard, or not be heard at all, in many cases.

Activities

ELMERING

Don is available for **Elmering/Mentoring**. Email ni6a@arrl.net

In the meanwhile, please check out the plethora of disaster radio communications topics at <https://www.karoecho.net> website and/or request specific literature to be created.

GMRS/FRS

KARO ECHO currently has twelve dual-licensed GMRS/Ham operators; but more are desired in order to provide a parallel network to ease congestion on our ham bands. Contact the FCC for information on getting your GMRS license and check out our webpage at <https://www.karoecho.net/workstreams/frsgmrs>

We hope to have the **Berkeley CERT and Inter-Neighborhood Network (BeCERTAINN)** present at The Arlington Park Clubhouse this March or April for our district CERT FRS/GMRS radio enthusiasts (time and date TBA). The presentation will be on how to use FRS and GMRS radios, a comparison of the two, what radio features to look for, what to buy, mutual aid between neighborhoods sharing resources, an operation of the BeCertainn GMRS repeater (GMRS Ch.22 RX 462.725 MHz TX +5 MHz PL 88), that is located in Berkeley and has good coverage in our area. They have invited Kensington/El Cerrito GMRS operators (as well as those from surrounding communities) to participate in their weekly net. Stay tuned for specifics.

Weekly Net Control Rotation

Thanks go out to the 8 volunteer stations listed below who have been taking turns at NCS over the past few months. This rotation has been working very well and everyone has been doing a great job. There are opportunities to fill in when a regular station has a scheduling conflict and there is always room to add more stations to the rotation. The NCS isn't expected to lead an exercise each week, but is welcome to. The exercise/training group will continue to provide this content following the check-ins, as possible. Please [download the new Net Script for NCS operators](#). The protocol for voicing "emergency" traffic has changed.

Action Item: Help create a deep pool of skilled NC operators. Please contact Howdy ke6bee@arrl.net if you are interested in taking a net control assignment.

KE6BEE	Howdy Goudey	K6RJM	Rob McNicholas
KK6NDF	Hal Graboske	KE6HCE	Armando Picciotto
KM6HBO	Jamuel Starkey	NI6A	Don Simon
KK6GIO	Larry Vanselow	KK6SRD	Ken Gustafson

Technical Work Group Activity

Don NI6A, Howdy KE6BEE and Hal KK6NDF helped Natalie KM6UCF install a dual-band TRAM 1480 antenna on her roof.

In preparation for the SET, the installed Kenwood TM-741a radio in the Harding clubhouse was tested, as no one had used this radio for many years. There is a nice Diamond X-500 HNA antenna on the roof of the clubhouse and SWR measurements checked out fine. This equipment is in good working condition and only required swapping the mic for one with a more reliable PTT switch. Karen KK6ZPM operated this station during the SET and had very strong communication with all the stations she contacted.

Howdy KE6BEE has fixed one of the two broken Kenwood TM-741a radios and a Kenwood TM-733a that were previously installed in other El Cerrito locations. The problem with the third Kenwood TM-741a has been isolated to the control head, so at least the rest of the radio is functional by testing with the head (face plate) from another radio. One of the Kenwood TM-741a radios was missing buttons because an internal sheet of foam meant to retain the buttons had degraded. Replacement buttons were made with a 3D printer and all the buttons are now being retained with o-rings rather than foam.

Jamuel KM6HBO, Don NI6A and Howdy KE6BEE have also began work on reconditioning the dysfunctional Diamond X-500 HNA antenna that was previously installed at the El Cerrito Senior Center. Samuel has bought new high voltage ceramic disc capacitors for the project.

Don NI6A is putting finishing touches on a KaroEcho portable Go-Kart.

Action Item: We can use additional technical know-how and help. Also, if you are interested in learning more about hardware troubleshooting, design/planning and maintenance, we are happy to provide on-the-job training, see <https://www.karoecho.net/workstreams/physical-infrastructure>).

About KARO ECHO

KARO ECHO is the name of the Kensington Amateur Radio Operators and the El Cerrito Ham Operators mutual benefit association, an all-volunteer non-profit group of amateur radio operators providing auxiliary communications for the cities of Kensington and El Cerrito in the event of a disaster. KARO ECHO works with CERT (Community Emergency Response Teams) in Kensington and El Cerrito, but is not an official part of the CERT program.

Monthly in-person meetings of KARO ECHO are on the 2nd Monday of each month at 7:30 pm at the Arlington Park Clubhouse, 1120 Arlington Blvd, El Cerrito, CA. The next meetings are:

- ◆ March 11th, 2019
- ◆ April 8th, 2019
- ◆ May 13th, 2019

Yearly dues are \$30/year for individuals, \$40/year for a family membership. Mail to:

KARO ECHO, PO Box 2025, 6324 Fairmont Ave, El Cerrito, CA 94530-3651

Please see our website for more information: www.karoecho.net

You can contact the KARO ECHO board by email: info@karoecho.net

KAROECHO.Net Website

Especially, check out the EVENTS Page (<https://www.karoecho.net/events>) and the WORKSTREAMS drop-down menu which will lead one to an extensive training page that provides online learning at your own pace. Everything from the very beginning to advanced EmComm operations is detailed. The RESOURCE page has many excellent outside links.

- ◆ If you are on Facebook, contribute to the KARO ECHO Facebook Group Page at <https://www.facebook.com/groups/1451216838315743/>
- ◆ If you haven't already filled out the JOIN form please do. Find it as a drop down menu under "Get Involved" See <https://www.karoecho.net/join>
- ◆ A follow-through novice primer has been put on the website for new hams once they have bought their radio and want to learn more. See: <https://drive.google.com/file/d/10J-569BRrx5adhAhJGPeNITU6B9Yi6z/view>
- ◆ Also a new Dual-Band antenna primer for new hams who want to graduate from the rubber-ducky world is at https://drive.google.com/file/d/1u_ozABBRYDJDACFJRTV_rxWF1WjCgW_I/view
- ◆ Note that the Tram 1480 gain dual band antenna is currently still available for \$51 (no tax and free shipping) on ebay. That and an inexpensive speaker tripod is a dynamite combination for portable operation. This antenna is equivalent to the Diamond X-200a antenna which sells at HRO for \$125.00 before taxes and shipping.
- ◆ For newbies, please visit <https://www.karoecho.net/workstreams/training> and read the study materials. It is all there except for hands-on experience. Ask questions! **On every Thursday evening net** there will be a training session and/or discussion. Summaries of recent net events are found under our past events page at <https://www.karoecho.net/events/past-events>
- ◆ Note: See the **KARO ECHO Agenda** for our upcoming Monday, Feb 11, 2019 Meeting see: <https://www.karoecho.net/events> the agenda will be made available no later than the Sunday immediately preceding the meeting.
- ◆ All recent **KARO ECHO Minutes** will be found at our **Past Events page** <https://www.karoecho.net/events/past-events.Past>. We are now including past Executive Board Minutes as well. Newsletters are on the Documents Page.

If you desire to be removed from this email list, please email Don, ni6a@arrl.net

Emergency Planning

Tassajara and (EC9) Harding School Playgound (EC5) Clubhouse News

Harding Clubhouse and Tassajara Park Clubhouse both have installed antennas and radio equipment, but do not have emergency power capabilities. We also don't have reliable access to these facilities in the case of an emergency. At the next meeting we will discuss the best use/deployment of this equipment. It has been suggested that we install the radios in portable go-karts, with generous batteries, capable of being deployed anywhere in KE as needed and focus on the installation of good rooftop gain antennas (both ham and FRS/GMRS antennas) on the city facilities with exterior mounted patch boxes, so these antenna connections are reliably available during an emergency.

Outreach, Education and Licensing

The **Benicia Amateur Radio Club (BARC)** will be holding a 1 day ham class and licensing session (Ham Cram) on May 4th, 2019. See http://beniciaarc.com/wp/?page_id=8

KARO ECHO and the **East Bay ARC (EBARC)** will jointly sponsor a Technicians class course taught by Ken Fowler beginning Wednesday, April 3, 2019. It will run for 10 weeks ending with a Technician Class exam from 6:30-9 pm. The class is free. The textbook is The ARRL Ham Radio License Manual Revised 4th Edition. Books will be available for purchase. FCC examinations and license applications will be administered at the final class session by the EBARC Volunteer Examiners for a fee of \$15. Please register by late March. More information will be forthcoming at www.ko6no.com. Click to Register, or email: ko6no@comcast.net, or Contact Ken Fowler at 510-222-0830. This class will be offered in El Cerrito at the Arlington Park Clubhouse, 1120 Arlington Blvd. 94530

The **Mount Diablo Amateur Radio Club (MDARC)** also offers courses and exams. See <http://www.mdarc.org/activities/education/Classes> and <http://www.mdarc.org/activities/license-testing>. Tests are offered at 6 pm before the MDARC regular meeting begins.

Ham Cram—Late Spring / Early Summer

KARO ECHO hopes to run a one-day Ham Cram, also at Arlington Park Clubhouse in early summer or late Spring, thus providing us adequate time to widely publicize it through local community newsletters, CERT groups, newspapers, and digital media outlets that cover our area.

This will be a recruitment push for needed new operators in Kensington and El Cerrito. Recruitment--as well as engaging our current and past members--should be seen as an essential ingredient and high priority if we are to reach our service potential.

Action Item: Become a Volunteer Examiner (VE) in the ARRL VEC program. Go to <http://www.arrl.org/become-an-arrl-ve> and take their free open book test to become a VE.

Outreach and Recruitment

Although getting over 20 hams working together at the February 2019 SET was a great success, we still need to further develop a deep pool of skilled radio operators to be able to provide radio coverage for all of Kensington and El Cerrito, with 24/7 coverage during an emergency. The Ham Cram mentioned above can be a big part of building depth for Karo-Echo, but to be successful we will need a lot of advanced publicity and outreach in our West Contra Costa County area. We can use your help and ideas regarding how and where to spread the word.

Edward Carney, KM6UBY, did a great job compiling a complete up-to-date listing of all the existing hams with their addresses in El Cerrito, Kensington, and Richmond. This will allow us to send a mailer to all licensed hams in our area informing them of our reorganization, aspirations, and need for their participation. This mailing will also be an expense; but the return on investment promises to be great. Karen, KK6ZPM has proposed a postcard campaign to contact EC & Ken ham licensees using Edward's list. The basic concept is to mail a postcard that lists the weekly KaroEcho Net and other public service ham nets in our area, encouraging the licensee to participate. Postcards are cheaper & more appealing than letters to read and save.

Come with ideas to talk more about outreach and recruitment at the meeting on Monday, March 11.

Photos from the Feb 23 SET

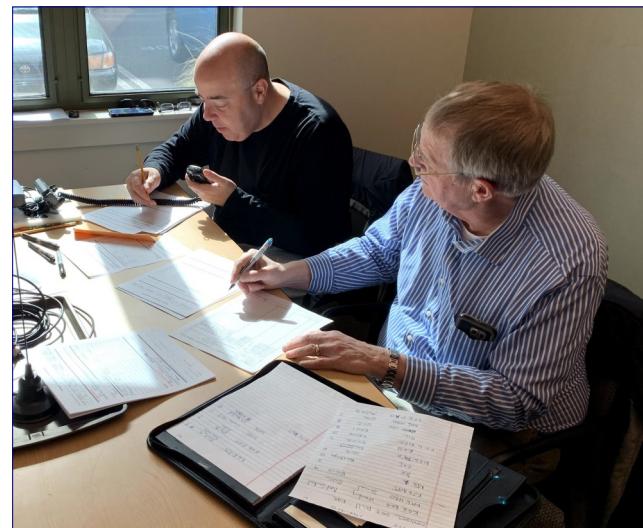
There were numerous great photos and videos taken of operations during the SET.

Action Item: Looking for a volunteer photo and video editor. It would be great if you, or someone you know with media skills, could turn our documentation of the SET into a photo collage and short, nicely edited, video to help promote the work that KARO ECHO is doing.



David KJ6AAT & Dianne KK6RED operating from this well appointed mobile station at EC10 Centennial Park.

Photo by Diane KK6RED.



Jamuel KM6HBO and Larry operating from the El Cerrito City Hall EOC. Photo by Christian KK6EPZ



Rob K6RJM operating for EC3/4 at upper Cerrito Vista Park (tennis courts). Photo by Christian KK6EPZ



Dave KM6TCB operating for EC6 at Cerrito Vista Park.
Photo by Christian KK6EPZ